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U.S. AGENCY FOR INTERNATIONAL DEVELOPMENT
BUREAU FOR ASIA
AFGHANISTAN

INITIAL ENVIRONMENTAL EXAMINATION
Multi-Year Assistance Program (MYAP) Afghanistan FY 08-10

PROGRAM/ACTIVITY DATA:

Country Code-SO: SO 306-A-07-00504-00
SO Name: Agriculture and Alternative Livelihoods
Country or Region: Afghanistan/Asia
Activity Name: World Vision Afghanistan Health and Livelihood Initiative in Ghor

Funding Begin: FY 2008	**Funding End:** FY 2010	**LOP Amount:** $10,649,144 (and 23,358 MT commodities)
	Sub-Activity Amount:	
IEE Prepared by: World Vision		**Date:** January 22, 2008
IEE Amendment (Y/N): N	If "Yes," Number @ Date of Original IEE:	

ENVIRONMENTAL ACTION RECOMMENDED: (Place X where applicable)

Categorical Exclusion:	☒	Deferral:	☐
Positive Determination:	☒	Negative Determination:	☒
With Conditions:	☒	Without Conditions:	☒

1. SUMMARY OF FINDINGS

Background

Afghanistan is a nation struggling to cope with the consequences of over two decades of conflict, years of continuous drought, a chronic shortage of food and the absence of social safety nets. In addition, it is a country prone to shocks, including floods, earthquakes, and landslides due to snowfalls. Harsh winters mean that many rural areas are isolated by heavy snow and inhabitants suffer from a lack of access to markets and food stocks, so food needs to be pre-positioned or distributed to enhance food security. Horse-drawn carts and traveling long distances on foot is common despite Afghanistan's few unpaved and dangerous roads.

Program Description

In order to offset the impacts described above, World Vision proposes a Multi-Year Activity Plan (MYAP) targeting approximately 17,976 vulnerable households in Ghor

Province (Chagcharan, Dowlatyar, CharSada, Daulina and Lal Wa Sarjangal Districts). An asset mapping and consolidation exercise will be conducted at the beginning of the project in existing communities in order to select participants for inclusion in the program. The proposed program strategy stresses sustainability and longer-term resiliency of participant families to shocks. Participants will be selected based on their vulnerability status.

Activities

The following activities are proposed:

Interdisciplinary value-chain analysis for priority value chains; wheat, fruit, trees, and vegetables
Activities will begin with a study or consolidation of existing studies on markets, products, linkages and strategies in Afghanistan. Specific product sectors will be identified as high potential marketing projects and market linkages and maps will be developed. Local and (district) level government officials from the Ministry of Agriculture, as well as other appropriate district level producer Associations will be closely involved in these studies.

Introduce and disseminate improved wheat varieties (disease, pest, and drought tolerant)
Two large sets of test demonstration seed multiplication wheat plots, using currently unused MOA lands, will be established. The plots will be used to test the adaptation of varieties to local conditions, demonstration to farmers -- through a Farmer-Field-School approach to field days and initial seed multiplication. Field days will include training on proper planting, fertility management, harvest, post-harvest handling and storage of the wheat crop. Conservation farming will be encouraged to enhance soil fertility, reduce build-up of diseases and pest populations, and reduce production risk through increased crop diversity.

Establishment of sustainable kitchen/school/health post vegetable and fruit gardens for improved dietary diversity
Gardens will be an integrated training site system consisting of small gardens, food preservation training, and health and nutrition messaging. About 100 small garden sites are planned over the life of the MYAP, and will be monitored by Ministry of Agriculture staff. The gardens will incorporate conservation farming techniques, and use of organic fertilizers. Training in food preservation provides a way of maintaining vegetable consumption during lean periods. Together, these components increase small-scale agricultural production and utilization at the household level.

Tree Nurseries for resilience against future shocks
Ten tree nurseries will be created over the life of the MYAP. The nurseries will provide environmental enhancement by addressing soil depletion of soil organic matter and soil nutrients primarily due to deforestation. Soil erosion and excessive leaching are also widespread problems. Farmers will be trained on conservation farming to prevent erosion and nutrient leaching through the use of mulches and compost. The nurseries will strengthen the target households resilience against future shocks by protecting the sell off of assets in the event of a shock. Two of the nurseries will be developed on currently

fallow MOA land, and the other eight on private land. Walnut, apricot, apple, almond, acacia and Fraxinus along with other locally-appropriate herbs will be the primary tree species planted in the nurseries. Those species will add to household level income, as an income generating crop.

Conduct PRA-based farming systems analyses in representative valleys
This study project is not expected to have significant impact on the environment.

Provision of appropriate health and growth monitoring of vulnerable children
This training activity is not expected to have significant environmental impact, but rather will improve human health through nutrition training and build community resilience against future health/nutrition shocks.

Provision of appropriate nutritional support to vulnerable children
This feeding activity is not expected to have significant environmental impact, but rather will improve human health through nutrition training and build community resilience against future health/nutrition shocks.

Utilize existing health structure or system to train/refresh health workers in identifying Mal-nourished children
This training activity is not expected to have significant environmental impact, but rather will improve human health through nutrition training and build community resilience against future health/nutrition shocks.

Provide supplementary feeding to malnourished pregnant and lactating women
This feeding activity is not expected to have significant environmental impact, but rather will improve human health through nutrition training and build community resilience against future health/nutrition shocks.

Utilize existing health systems to train health workers in identifying at risk women
This training activity is not expected to have a significant environmental impact, but rather will improve human health through nutrition training and build community resilience against future health/nutrition shocks.

Provide behavior change communication through Mother/Father Groups
This training activity is not expected to have significant environmental impact, but rather will improve human health through nutrition training and build community resilience against future health/nutrition shocks.

2. ENVIRONMENTAL RECOMMENDATIONS:

Based on the environmental review presented in the IEE, the following determinations are made:

1). Categorical exclusion

The following activities are recommended for categorical exclusion pursuant to 22 CFR 216.2 (c)(2)(i), (education, technical assistance, or training programs):

- Provision of appropriate health and growth monitoring to vulnerable children.
- Provision of appropriate nutritional support to vulnerable children.
- Utilize existing health structure or system to train/refresh health workers in identifying malnourished children.
- Provide supplementary feeding to malnourished pregnant and lactating women.
- Utilize existing health systems to train health workers in identifying at risk women.
- Provide behavior change communication through Mother/Father Groups.

The following activities are recommended for categorical exclusion pursuant to 22 CFR 216.2 (c)(2)(iii), (analyses, studies, academic or research workshops and meetings):

- Inter-disciplinary value-chain analysis for priority value chains (wheat, fruit, trees, and vegetables).
- Conduct PRA-based farming systems analyses in representative valleys.

2). Negative determination without conditions

Pursuant to (22 CFR 216.3 (a)(2)(iii)), the following activities are recommended for a negative determination without conditions:

- Establishment of sustainable kitchen/school/health post vegetable and fruit gardens for improved dietary diversity.

3). Negative determination with conditions

The following activities are recommended for a negative determination with conditions pursuant to 22 CFR 216.3(a)(2)(iii). MYAP/Afghanistan has developed design criteria for such actions which, if applied in the design of the action, will avoid a significant impact on the environment:

- Introduce and disseminate improved wheat varieties (disease, pest, and drought tolerant).
- Establish Tree Nurseries for community resilience against future shocks.

4). Positive Determination

Should activities occur that involve the procurement or use of pesticides for weed or pest control, these activities are recommended for a positive determination. Weed and pest control activities should only occur as part of an Integrated Pest Management (IPM) program. Weed removal by hoeing is recommended. Pest control by means other than through the use of chemical is recommended. Should pesticide procurement of use for weed or pest control be contemplated, this would require the preparation of an Environmental Assessment (EA) and the preparation of a Pesticide Evaluation Report and Safe Use Action Plan (PERSUAP) as part of the EA.

APPROVAL OF RECOMMENDED ENVIRONMENTAL ACTIONS:

CLEARANCE:

Mission Director Approval: _____ Michael T. Yates, PH.D — 4/22/08 Date

Mission Environmental Officer Approval: _____ Robert Hunchett — 4/12/08 Date

Team Leader Approval: _____ Pedro Carrillo — April 12 2008 Date

Regional Legal Advisor Approval: _____ Peter Young — 4-20-08 Date

CONCURRENCE:

DCHA Bureau Environmental Officer (Acting) _____ ~~John O. Wilson~~ Joyce A. Jatko — 6/16/08 Date

Approved: ☒

Disapproved: ☐

Agreement officer _____ 7/30/08 Date

TITLE II ENVIRONMENTAL COMPLIANCE FACESHEET
MYAP AFGHANISTAN 2008-11 DRAFT

Title of MYAP Activity: MYAP Afghanistan FY08-11

CS name/Country/Region: World Vision/Afghanistan/Near East

Funding Period: FY 2008- FY 2011

Resource Levels: Commodities (dollar equivalent, incl. monetization):
_____$24,307,610___ (NER) _____ (ER, if any)
Total metric tonnage request:
23,240 MT (NER) _____ (ER, if any)
202(e) grant: $ 2,024,090
ITSH grant: $ 7,568,230

IEE Statement Prepared by: Colette Powers

Date 16 July 2008 **Title**: Director, GAM Global Food Resources

IEE Amendment (Y/N)? _Y_ Date & Contact Person for Original IEE: n/a

_____15 January 2008_____**(Date) &** _____Colette Powers_____ **(Contact)**

Environmental Media and/or Human Health Potentially Impacted
(check all that apply):

air___ water_X_ land_X__biodiversity (specify)_____*human health____other____ none_____*

Environmental Action(s) Recommended (check all that apply):

___X__ 1. *Request for Categorical Exclusion*(s)

___X__ 2. Initial Environmental Examination:

For a Single IEE:

__X_*Negative Determination*: no significant adverse effects expected regarding the proposed activities, which are well defined over life of the proposal.

__X__*without conditions* (ideal conditions, no special mitigation measures needed, normal good practices and engineering will be used)
__X__*with conditions* (non-ideal conditions, special mitigation measures specified to prevent unintended impact)

For an Umbrella IEE:

__ _*Negative Determination:* no significant adverse effects expected, but multiple sites and sub grant activities are involved that are not yet fully defined or designed. Refer to "Umbrella IEEs and Subgrant Environmental Screening" in the EPTM (March 2002), Annex G.

___ conditions agreed to among Umbrella partners regarding an appropriate process of environmental capacity building and screening, mitigation and monitoring.

____*Positive Determination*: IEE confirms potential for significant adverse effect of one or more activities. Appropriate environmental review needed/conducted.

____ EA to be / being / has been (circle one) conducted. Note that the activities affected cannot go forward until the EA is approved.

____ *Deferral:* one or more elements not yet sufficiently defined to perform environmental analysis; activities will not be implemented until amended IEE is approved.

Summary of Findings:

The IEE has been completed in accordance with USAID/DCHA/FFP guidelines stipulated in *USAID Environmental Procedures: Title 22, Code of Federal Regulations, Part 216* and following the recommendations presented in *the Environmental Documentation Manual, A Cooperating Sponsor's Field Guide to Environmental Compliance Procedures*, and the *Environmental Guidelines for Small-Scale Activities in Africa* and the revised second edition modules for the *Environmental Guidelines*. World Vision will be incorporating visual indicators and conducting spot checks as part of their supervision efforts in the field.

This Initial Environmental Examination satisfies the conditions of the environmental procedures for umbrella activities and delegation of environmental review responsibility to Missions for PVO/NGO umbrella-type projects (Cable 95 STATE 257896)

Environmental Determinations:

Based on the environmental review presented in this IEE, the following determinations are made:

1. Categorical exclusion

A recommendation for ***categorical exclusion*** is requested for the following activities:

Pursuant to 22 CFR 216.2 (c)(2)(i) Education, technical assistance, or training programs except to the extent such programs include activities directly affecting the environment (such as construction of facilities, etc):

- Provision of appropriate health and growth monitoring to vulnerable children
- Provision of appropriate nutritional support to vulnerable children
- Utilize existing health structure or system to train/refresh health workers in identifying malnourished children
- Provide supplementary feeding to malnourished pregnant and lactating women
- Utilize existing health systems to train health workers in identifying at risk women
- Provide behavior change communication through Mother/Father Groups

Pursuant to 22 CFR 216.2 (c)(2)(iii) Analyses, studies, academic or research workshops and meetings:

- Interdisciplinary value-chain analysis for each of the priority value chains eg. Wheat, fruit, trees, and vegetables
- Conduct PRA-based farming systems analyses in representative valleys

2. Negative determination

The following activities are determined to qualify for Negative Determination without conditions (22 CFR 216.3(a)(2)(iii)).

Establishment of sustainable kitchen/school/health post vegetable and fruit gardens for improved dietary diversity

3. Negative Determination with conditions (Umbrella IEE)

The following activities are determined to qualify for Negative Determinations with Conditions (22 CFR 216.3(a)(2) (iii)). MYAP/Afghanistan has developed design criteria for such actions which, if applied in the design of the action, will avoid a significant effect on the environment:

- Introduce and disseminate improved wheat varieties (disease, pest, and drought tolerant)
- Establish Tree Nurseries for community resilience against future shocks

Based on environmental review procedures, including an environmental monitoring system (EMS), the use of an environmental screening form and the monitoring, evaluation and mitigation procedures specified in this IEE, a **Negative Determinations with Conditions (22 CFR 216.3(a)(2) (iii))** is recommended for the following activities:

None

USAID APPROVAL OF ENVIRONMENTAL ACTION(S) RECOMMENDED:

USAID/Afghanistan Clearances:

Mission Director: _____/S/_____ Date:

Regional Food for Peace Officer:_____ Date:_____

Mission Environmental Officer:_____/S/_____ Date _____.

USAID/Washington Clearances:

Food for Peace Dpty. Director: _____/S/_____ Date: _____

DCHA Bureau Environment Officer: _____/S/_____ Date:_____.

USAID/Washington Concurrence:

Bureau Environment Officer: _____/S/_____Date: _____

Program/Project Data:

Program/Activity: MYAP Afghanistan/Healing

CS Name, Country/Region: World Vision, Afghanistan/Ghor Province: Chigcharan, Dawlatyar, Charsada, Daulina and La-or-Sarjangal Districts

1. BACKGROUND AND ACTIVITY DESCRIPTION

   1.1 Background
   1.2 Description of Activities
   1.3 Purpose and Scope of IEE

2. COUNTRY AND ENVIRONMENTAL INFORMATION (BASELINE INFORMATION)

   2.1 Locations Affected
   2.2 National Environmental Policies and Procedures (of host country both for environmental assessment and pertaining to the sector)

3. EVALUATION OF ACTIVITY/PROGRAM ISSUES WITH RESPECT TO ENVIRONMENTAL IMPACT POTENTIAL

   3.1 Interdisciplinary value-chain analysis for each of the priority value chains eg. Wheat, fruit, trees, and vegetables

   3.2 Conduct PRA-based farming systems analyses in representative valleys

   3.3 Introduce and disseminate improved wheat varieties (disease, pest, and drought tolerant)

   3.4. Establishment of sustainable kitchen/school/health post vegetable and fruit gardens for improved dietary diversity

   3.5 Establish Tree Nurseries for community resilience against future shocks

   3.6 Provision of appropriate health and growth monitoring to vulnerable children

   3.7 Provision of appropriate nutritional support to vulnerable children

   3.8 Utilize existing health structure or system to train/refresh health workers in identifying malnourished children

   3.9 Provide supplementary feeding to malnourished pregnant and lactating women

   3.10 Utilize existing health systems to train health workers in identifying at risk women

   3.11 Provide behavior change communication through Mother/Father Groups

4. RECOMMENDED MITIGATION ACTIONS (INCLUDING MONITORING AND EVALUATION)

   4.1 Mitigation actions and conditions

INITIAL ENVIRONMENTAL EXAMINATION

Program/Project Data:

Program/Activity:	MYAP Afghanistan/Healing
CS Name, Country/Region:	World Vision, Afghanistan/Near East
Operational Areas:	Ghor Province

1.0 BACKGROUND AND ACTIVITY DISCRIPTION

1.1 Background

Afghanistan is a landlocked country with an area of 65 million hectares, of which about 80% is either mountainous or desert. Climatic conditions are largely sub-tropical with cold and dry winter in the highlands and arid and semi-arid in the lowlands. Most of the rains fall between October and March but with high variability. Afghanistan's economy is driven by agriculture and the majority of the rural people depend on it for their livelihood. Irrigated agriculture accounts for 43% of the total annual cropped area (3.5 M hectare), generates nearly 85% of the annual agricultural output and provides livelihood (jobs, income, and food) to nearly 85% of the population. Land holding is highly skewed. The majority of farmers are smallholders who cultivate about 2 hectares of land, depending on location.

Afghanistan is a nation struggling to cope with the consequences of over two decades of conflict, years of continuous drought, a chronic shortage of food and the absence of social safety nets. In addition, it is a country prone to shocks, including floods, earthquakes, and landslides due to snowfalls. Harsh winters mean that many rural areas are isolated by heavy snow and inhabitants suffer from a lack of access to markets and food stocks, so food needs to be pre-positioned or distributed to enhance food security. Horse-drawn carts and traveling long distances on foot is common despite Afghanistan's few unpaved and dangerous roads. Violence and armed struggle are still a problem and threaten the lives of NGO workers. The violence is particularly found in the Eastern and Southern regions adjacent to Pakistan where remnants of the Taliban's regime are suspected of hiding. Unfortunately, looking ahead the security situation has worsened in the past year or so, and has this been a significant constraint on the recovery and reconstruction of the country and even on the potential activities proposed under this MYAP.

This MYAP fully supports, and is in line with, the Afghanistan Compact, the Afghanistan National Development Strategy objectives and the United Nations Millennium Development Goals. According to National Risk and Vulnerability Assessment (NRVA), much of the population suffers from very poor food consumption. World Vision puts emphasis on the empowerment of local communities by involving them in the implementation of our program to foster sustainability through local capacity building.

1.2 Description of Activities

In order to offset the impacts described above, World Vision proposes a Multi-Year Activity Plan (MYAP) targeting approximately 108,785 vulnerable beneficiaries in Ghor Province (Chigcharan, Dawlatyar, Charsada, Daulina and La-or-Sarjangal Districts). An asset mapping and consolidation exercise will be conducted at the beginning of the project in existing communities in order to select participants for inclusion in the program. The proposed program strategy stresses sustainability and longer-term resiliency of participant families to shocks. Participants will be selected based on their vulnerability status.

The following activities are proposed:

Interdisciplinary value-chain analysis for each of the priority value chains eg. Wheat, fruit, trees, and vegetables

Activities will begin with a study or consolidation of existing studies on markets, products, linkages and strategies in Afghanistan. Specific product sectors will be identified as high potential marketing projects and market linkages and maps will be developed. Local and district level government officials from the Ministry of Agriculture, as well as other appropriate district level producer Associations will be closely involved in these studies.

Conduct participatory rural assessment-based farming systems analyses in representative valleys

Gain a thorough understanding of the farming systems of the five target districts at a micro-level. Ghor is mountainous, and the populations are spread throughout valleys with some form of natural water source (spring or rain-fed). Using the Participatory Rural Appraisal method, we will learn in-depth information about the communities, as well as allow them a voice in the design, and implementation of the program. Data will also be used to gauge community acceptance levels to the proposed activities.

Introduce and disseminate improved wheat varieties (disease, pest, and drought tolerant)

Two large sets of test demonstration seed multiplication wheat plots, using currently unused MOA lands, will be established. The plots will be used to test the adaptation of varieties to local conditions, demonstration to farmers – through a Farmer-Field-School approach to field days and initial seed multiplication. Field days will include training on proper planting, weed and pest control, fertility management, harvest, post-harvest handling and storage of the wheat crop. Conservation farming will be encouraged to enhance soil fertility, reduce build-up of diseases and pest populations, and reduce production risk through increased crop diversity.

Establishment of sustainable kitchen/school/health post vegetable and fruit gardens for improved dietary diversity

Gardens will be an integrated training site system consisting of small gardens, food preservation training, and health and nutrition messaging. About 200 small garden sites are planned over the life of the MYAP, and will be monitored by Ministry of Agriculture staff. The gardens will incorporate conservation farming techniques, and use of organic fertilizers. Training in food preservation provides a way of maintaining vegetable consumption during lean periods. Together, these components increase small-scale agricultural production and utilization at the household level.

Tree Nurseries for resilience against future shocks

Ten tree nurseries will be created over the life of the MYAP. The nurseries will provide environmental enhancement by addressing soil depletion of soil organic matter and soil nutrients primarily due to deforestation. Soil erosion and excessive leaching are also widespread problems. Farmers will be trained on conservation farming to prevent erosion and nutrient leaching through the use of mulches and compost. The nurseries will strengthen the target households' resilience against future shocks by protecting the sell off of assets in the event of a shock. Two of the nurseries will be developed on currently unused MOA land, and the other eight on private land. Walnut, apricot, apple, almond, acacia and Fraxinus along with other locally-appropriate herbs will be the primary tree species planted in the nurseries. Those species will add to household level income, as an income generating crop.

Provision of appropriate health and growth monitoring to vulnerable children

This training activity will have little or no environmental impact, but rather will improve health through nutrition training and build community resilience against future health/nutrition shocks.

Provision of appropriate nutritional support to vulnerable children
This feeding activity will have little or no environmental impact, but rather will improve health through nutrition training and build community resilience against future health/nutrition shocks.

Utilize existing health structure or system to train/refresh health workers in identifying malnourished children
This training activity will have little or no environmental impact, but rather will improve health through nutrition training and build community resilience against future health/nutrition shocks.

Provide supplementary feeding to malnourished pregnant and lactating women
This feeding activity will have little or no environmental impact, but rather will improve health through nutrition training and build community resilience against future health/nutrition shocks.

Utilize existing health systems to train health workers in identifying at risk women
This training activity will have little or no environmental impact, but rather will improve health through nutrition training and build community resilience against future health/nutrition shocks.

Provide behavior change communication through Mother/Father Groups
This training activity will have little or no environmental impact, but rather will improve health through nutrition training and build community resilience against future health/nutrition shocks.

1.3 Purpose and Scope of IEE
This IEE will examine all of the activities that are being proposed for the 2008-2011 MYAP. The examination will lead to the classification of all activities per Regulation 216 (22 CFR 216) requirements.

The interventions will be scrutinized within the context of this exercise to determine their potential for environmental disruption and to assure that implementation practices are in place to mitigate negative impacts. In conducting this examination, the author will evaluate potential environmental impacts based on the current state of knowledge derived from:

- Experience to date by World Vision, World Food Programme, and other NGOs working in Afghanistan, including Chemonics, REACH, Mercy Corps, and Catholic Relief Services, in the implementation of similar activities in the past. Because of the nature and longevity of food security activities in Afghanistan, there is a history of interventions that can be analyzed as part of the preparation of this IEE, including World Vision's $100 million multi-year funded USDA Food for Education Program.
- Government initiatives and guidance within the context of environmental management. This IEE will look at procedures required under Afghanistan law and at other documents to ensure that the proposed activities are compatible with and in some cases in direct support of governmental priorities and action plans.
- Published literature and the internet.
- Local knowledge through asking local people what potential problems they think might occur through implementation of the proposed activities.

The examination will be done within the context of the overall situation in Afghanistan, but it will specifically apply to the geographical areas covered by MYAP/Afghanistan.

2.0 COUNTRY AND ENVIRONMENTAL INFORMATION

2.1 Country Overview

Introduction

Afghanistan is a nation struggling to cope with the consequences of over two decades of conflict, years of continuous drought, a chronic shortage of food and the absence of social safety nets. In addition, it is a country prone to shocks, including floods, earthquakes, and landslides due to snowfalls. Harsh winters mean that many rural areas are isolated by heavy snow and inhabitants suffer from a lack of access to markets and food stocks, so food needs to be pre-positioned or distributed to enhance food security.

Horse-drawn carts and traveling long distances on foot is common despite Afghanistan's few unpaved and dangerous roads. Because of the wide range of temperature conditions found in Afghanistan, there is both a danger of heat exhaustion or even heatstroke in the lower regions during summer and wind chill, as well as frostbite in the mountains during winter. Violence and armed struggle are still a problem and threaten the lives of NGO workers. The violence is particularly found in the Eastern and Southern regions adjacent to Pakistan where remnants of the Taliban's regime are suspected of hiding. Unfortunately, looking ahead the security situation has worsened in the past year or so, and has this been a significant constraint on the recovery and reconstruction of the country and even on the potential activities proposed under this MYAP.

Land Density and Use

Afghanistan is a landlocked country with an area of 65 million hectares, of which about 80% is either mountainous or desert. Climatic conditions are largely sub-tropical with cold and dry winter in the highland and arid and semi-arid in the lowlands. Most of the rains fall between October and March but with high variability. Afghanistan's economy is driven by agriculture and the majority of the rural people depend on it for their livelihood. Irrigated agriculture accounts for 43% of the total annual cropped area (3.5 M hectare), generates nearly 85% of the annual agricultural output and provides livelihood (jobs, income, and food) to nearly 85% of the population. Land holding is highly skewed. The majority of farmers are smallholders who cultivate about 2 hectares of land, depending on location.

Afghanistan's topography is dominated by Hindu Kush Mountains which run northeast to southwest through the central portion of the country dividing the northern provinces from the remainder of the country. The southwest is occupied by desert plateau. The lowest point in the country is at Amu Darya at 258 meters above mean sea level (msl). The highest point is at Nowshak 7,485 meters above msl. The southern and western parts of the country are covered by deserts at elevations ranging from 500 to 1,000 meters above msl.

Within the country as a whole, the soils are characterized as high mountains serozems, desert steppe or meadow steppe. Loess is found in the north. The river valley soils are generally alluvial or meadow alluvial. Serozems and brown desert soils cover large portions of the country in the north and southwest. Overgrazing, deforestation, desertification, degradation of watersheds and erosion have been identified as significant environmental issues contributing to soil degradation and reduced soil productivity throughout Afghanistan.

Afghanistan's geographical circumstances are complex and generally described in terms of plate tectonics. The mountain chains comprised of the Hindu Kush, Pamir, Karakoram and Himalayan Ranges are believed to have been the result of a collision of the Indian Plate and Asia Plate which began approximately 50 million years ago and continues to the present day. Much of the country is known to be seismically active.

The sources of most of Afghanistan's rivers are in the mountains. Water levels in the rivers vary greatly with the highest levels in spring and early summer. In the remaining seasons the rivers may change into small streams or entirely disappear. Three watershed systems can be differentiated in Afghanistan:

The Eastern Basin (Indus). The Eastern Basin includes the Kabul and Logar Rivers and their tributaries which drain the eastern part of the country. The rivers within the eastern basin flow generally to the east and eventually join the Indus River and the Arabian Sea.

The Southern Basin (Sistan-Hilmand). The rivers of the Southern Basin flow generally to the southwest to the Lake of Sistan on the Afghanistan-Iran border and include the Helmand, (the country's largest river), the Farahrod and the Khashrod.

The Northern Basin (Amu Darya). The rivers in the northern part of the country flow northward to the Amu Darya River on the country's northern boundary (and eventually to the Aral Sea) or disappear in the desert sands.

The climate of Afghanistan is continental in nature, with cold winters and hot summers. Most of the country is arid or semi-arid, with low amounts of precipitation and high variability between years.

Topography and climatic conditions impose severe limitations on land use in Afghanistan. Nearly 80% of all crops produced in Afghanistan are produced under irrigation. There are three principal seasons in Afghanistan: (1) the spring season, roughly from March to June, during which the main crops are barley, potatoes and some vegetables; (2) the summer season beginning in July and ending with the harvest in October during which rice, maize, melon and seasonal vegetables are grown; and (3) the winter season, roughly from November to February or March, during which a variety of crops is grown, including wheat, potato, oil seeds, and pulses. In theory, two or three crops can be grown in most places, but actual cropping intensities – the number of crops per unit cropped area per year – are less than two. Over the past 20 years, the irrigation infrastructure has deteriorated for lack of maintenance and repair. Flooding and water-logging followed by dry season drought and saline intrusion perversely affected agricultural production. Much of the irrigation system is in dire need of rehabilitation. A 1997 FAO/UNDP estimate is that out of the 3.5 M Hectare irrigated land, only 30% was "adequately" irrigated; the remaining 70% was inadequately irrigated due to lack of maintenance or abandonment, destruction, and poor on-farm water management. Some of the canals have also become dysfunctional due to missing mechanical parts and lack of locally skilled persons to maintain and operate them. This has had a detrimental effect on agriculture. As an example, area irrigated in Parwan declined from 25,000 hectare to 10,000 hectare due sedimentation in canals and poor maintenance.

Years of conflict, uncontrolled logging and overgrazing have resulted in severe environmental degradation across the country which, in turn, has created food insecurity for millions of vulnerable people. In recent years, integrated environmental protection projects have been undertaken in Afghanistan, including planting millions of saplings.

Health/Education

The population is estimated to be about 31 million with 44.6% below the age of 15, and overall growing at a rate of 2.7%, according to the United States Census Bureau (BUCEN). Fifty three percent of the population lives below the poverty line, and the unemployment rate is 40%.[1] Access to health care is limited, due to the lack of a functioning system and sufficiently trained medical doctors and nurses. Countrywide data is unavailable in many areas of child survival, nutrition, vaccination coverage,

[1] CIA World Factbook – 2006 and 2007.

HIV/AIDS, family planning and maternal care. Afghanistan's under 5 mortality rate is 239.9 per 1,000 live births, according to BUCEN. In Afghanistan, tuberculosis is a major public health burden. According to the World Health Organization (WHO) Global TB Report of 2006, Afghanistan ranks 17th among the 22 high-burden tuberculosis (TB) countries worldwide. Approximately 95,000 new TB cases occur annually in Afghanistan, and 26,000 people in the country die from TB every year. The TB situation in Afghanistan is different from most other countries in that it primarily affects women.

A National Risk and Vulnerability Survey conducted in 2003 estimated that 3.5 million of the 17.5 million Afghans living in rural areas suffer from extreme poverty and another 10.5 million are vulnerable to it. An estimated 48% of the children under 5 are thought to be malnourished and suffer from stunted growth – and almost three times more than the average for developing countries.

The once robust and well-respected education system in Afghanistan has fallen into a state of neglect. According to World Bank information, the adult literacy rate is 28%, but in general the rate for women is expected to be less. War has destroyed more than 70 percent of the schools and there are not enough teachers or necessities such as textbooks and notebooks. Accordingly, construction of basic educational facilities is of primary importance throughout the country.

Natural/Biological Resources

Located at the confluence of two biogeographic realms – the Palaeoartic and Indo-Malayan-Afghanistan has the unique distinction of being the original home of a very large number of plant and animal species, a majority of which are endemic. Afghanistan was renowned for its rich wildlife and diversity of habitats and still retains a wide variety of fauna. However, most of the country is subject to some degree of land degradation, (notably that resulting from some 20 years of war), deforestation and desertification.

Afghanistan is home to 119 species of mammals, 460 species of birds, four species of reptiles, and hundreds of species of insects and fish. Thirty five species of animals have been listed as either vulnerable or endangered. However, the number of threatened species may be higher as essentially no wildlife research has been undertaken in Afghanistan for many years.

The fresh-water fish of Afghanistan have been scarcely studied, but many are believed to be endemic. The total fish production in Afghanistan was estimated to be 1,300 tons in 1995, but no concrete statistical data exist for the past 10 years. Therefore, the true figure may be considerably different from the estimate.

Six protected areas have been identified in the country:

Ab-I-Estada Waterfowl Sanctuary
Ajar Valley Wildlife Reserve
Bande Amir National Park
Dashte Nawar Waterfowl Sanctuary
Pamir Buzurg Wildlife Sanctuary
Kole Hashmat Khan Waterfowl Sanctuary

Agriculture/Marketing

Irrigation has been recognized as a key for agriculture recovery and drought mitigation. The technology of gravity-flow irrigation in particular has been used. Many small-scale community-based irrigation systems were also developed by successive governments. A few large scale irrigation projects, like the Hilmand-Arghandab system in the South-West, the Khanabad system in Kunduz, the Ghaziabad farms near Jalalabad and Gavargan canal in Baghlan were constructed with external assistance before the war.

Much of the land irrigated by these schemes has over the years been abandoned because of water-logging and salination. War and drought has affected the efficiency of these schemes.

Basically, there are two types of irrigation systems: underground and surface. Underground systems, including karezes (Qantas), and shallow wells and spring-count for 70% of the irrigation systems; canals account for 30%. Canals are by far the most important irrigation system in the country. They water 75% of the irrigated land. Most of the canal irrigated land is located in the North, West, and Southwest of the country. Over 80% of the country's water resources originate from the Hindu Kush mountain, as the snow melts during spring and summer and flows to major rivers. At different locations along a river, small diversion structures are constructed, some from local materials, to divert land from rivers to canals.

Agriculture productivity in Afghanistan is low, compared to regional averages. Yields are low because of inadequate water supply and sub-optimal application of complementary inputs. From a near self-sufficiency in cereals in the early 1970s, Afghanistan has become a food deficit country, dependent upon external food aid. FAO annual crop assessment surveys indicate a big shortfall between what is produced and required for food security. Even in good years many households are not able to grow enough food for home consumption.

The development of agriculture and economic growth at large is very much dependent on the development of irrigation systems. Irrigation, drainage, and flood control investments can drastically increase productivity. Irrigation will stabilize harvest fluctuations, allow the introduction of second crops and further increase land productivity making it possible for increased application of fertilizer, the use of better seeds, and improved crop husbandry practices to boost domestic food production. With improved on-farm water management and appropriate inputs a long-term goal of national average of 4-6mt/ha for irrigated wheat, 25-30 mt/ha for tomatoes, 17-25mt/ha for potatoes and about 30 mt/ha for onions is feasible.

Crop intensification, defined as multiple cropping in a season on the same land, has also been considered by it became apparent that in the absence of short maturing crop varieties, farmers would be reluctant to intensify crop production. For agronomic reasons, second cropping of high-value crops appears to be not feasible, except perhaps in the warmer climates of Hilmand and Balkh. But here too it would not be an attractive proposition as vegetables require more water in the hot summer season. Moreover, Afghan farmers prefer to leave the land planted with wheat fallow until the next season rather than plant an additional crop.

In the late 1970s, horticulture accounted for 40% of the exports using only 6% of the total arable land and 12% of the irrigated land. Horticulture production declined rapidly during the war years but recovered significantly after 1992. A survey carried out by FAO in 1996 revealed that there had been a 24% increase in the orchard area under intense production (mostly grapes, apricots, apples, almonds, pomegranate and peach, under irrigation, in rows with specific plant density) from 63,600 ha in 1978 to 78,800 ha in 1996. In contrast, fruit tree species growing on marginal land plantations (predominantly mulberry, walnut, fig, quince, Russian olive and jujube, with intermittent irrigation or rain-fed and random plant density) declined from 33,600 ha in 1978, and 21,700 ha in 1996 (35 percent decrease). Forty-two percent of the orchards in 1996 were less than 1 year old, indicating strong resilience among farmers; replanting and improving their orchards even during the war time. The same FAO survey revealed that the area allocated to vegetables remained constant at 90,000 ha during this same period of time. The major exports were raisins, dried apricots and almonds. Raisins are economically the largest part of the horticultural crops in Afghanistan. They are also its primary export commodity. Potato, onions, tomatoes and eggplant were the vegetable occupying the largest areas. These high value cash crops contributed to the household income but also diversified the nutritional base of the population.

With the agricultural/marketing sector, there are a number of promising signs. In the past few years, many market-related infrastructure investments have been made in market collection centers, stores and dehydration facilities in order to facilitate horticulture growth and sectoral development. Fertilizer availability/use in Afghanistan increased from 170,000 metric tones in 2002 to 285,000 metric tones in 2004 and 415,000 metric tons in 2005 (no data available for 2003 which was largely affected by drought).

Natural Resources

Afghanistan has significant mineral resources, though these are currently largely unexploited. Igneous rocks typical of geologic provinces containing porphyry copper deposits are common in Afghanistan. Most of the country is part of the Tethyan geodynamic belt, which contains porphyry copper deposits in the Carpathian Mountains, of southern and eastern Europe, and in the Himalayas in central Asia. Relatively little is known about specific characteristics of the known specific characteristics of the known porphyry copper prospects in Afghanistan and there are no known deposits. Limestone is a ubiquitous mineral that are found in large deposits throughout Afghanistan. Lime is the most important component in cement, and has many additional uses in infrastructure, agriculture and industry. Most currently active limestone quarries are mined on a small scale and provide building stone for local markets. Larger operations would use standard open-pit mining methods. The demand for limestone normally increases with an increasing gross domestic production. Sand and gravel are fundamental materials needed for construction of roads, canals and other types of infrastructure required for nation building. Without adequate roads and airport runways, a sustainable and expanding commerce will be difficult to achieve. Tracts exist with a slope of 10 degrees or less. Unconsolidated sand and gravel deposits readily extracted from sediments along rivers and streams and bedrock are crushed to a size suitable for use. Unconsolidated sand and gravel extraction requires less effort, money and equipment than does crushing bedrock. Most of the cost to the user is from transportation, not from the cost of extraction. This necessary proximity to populated areas can lead to conflict over land use, issues related to local environmental impact, and, in some areas, to life quality issues.

2.2 Target Areas

A map of Afghanistan showing relief, rivers, provinces and the main centers of population is provided in Appendix A. Afghanistan is divided into five regions: 1.) the North, Northeast and East, 2.) Northwest, 3.) Central Highlands and Extreme Northeast, 4.) South, Southeast, and Southwest, and 5.) the Poppy Growing Areas. Based on National Risk and Vulnerability Assessment and evaluations and assessments conducted by World Vision, and through work with the province level local governments, MYAP Afghanistan will work in Ghor province located in the Central Highlands. A short description of each of the five regions is provided below:

North, Northeast, and East: 12 provinces, including Bahlan, Balkh, Kabul, Kapisa, Kunar, Kunduz, Laghman, Nuristan, Panjsher, Parwan, Samangan, and Takhar. Except for Samangan, which is rain-fed, these provinces rely on intensive irrigation for crop production. This area will generally speaking be food secure with food surpluses. However, there are concerns regarding crop diseases and locusts, which, if they occur, could result in moderate food insecurity. Near-term prognosis is food secure.[2]

Northwest: Four provinces, including Baghdis, Faryab, Jawzjan, and Sari Pul. These provinces mainly practice rain-fed agriculture and are vulnerable to low precipitation. This area will experience high food insecurity; however, if the wheat crop suffers from "shrinkage", the situation could worsen to extreme food insecurity. Near-term prognosis is high food insecurity.[3]

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[2] "Afghanistan Food Security Conditions and Causes: A Special Report by the Famine Early Warning Systems Network (FEWS NET). August 2007.

[3] IBID.

Central Highlands and Extreme Northeast: Five provinces, including Badakshan, Bamyan, Day Kundi, Ghor, and Wardak. These provinces have an elevation of over 2,500 meters; their climate is not conducive to agriculture; arable land is in short supply; there are few roads and permanent marketplaces; and the populations of these provinces migrate in search of work. This area can expect moderate food insecurity if there is sufficient off-farm employment in Afghanistan and Iran; if not, this region is likely to suffer from high to extreme food insecurity. Near-term prognosis is moderate food insecurity depending on availability of jobs. Other characteristics of this area include very poor food diversity and chronic food insecurity.[4]

South, Southeast, and Southwest: Thirteen provinces, including: Farah, Ghazni, Helmand, Hirat, Kandahar, Khost, Logar, Nangarhar, Nimroz, Paktika, Paktiya, Uruzgan, and Zabul. These provinces border Iran and Pakistan and are located at lower elevations. Their populations have ethnic ties to Iran and Pakistan and migrate to the Gulf States and Iran for work opportunities. Agriculture and smuggling account for portions of their livelihoods. This area will be moderately food insecure, depending on cross-border "trade", i.e. smuggling, and access to off-farm jobs in the Gulf States; however, if that "trade" is curtailed and jobs do not materialize, this region could revert to high to extreme food insecurity. Near-term prognosis is moderate food insecurity depending on jobs outside of Afghanistan. Other characteristics of this area include: conflict prone and insecure; hostility toward education, drought conditions, and very poor food diversity.[5]

The Poppy-growing areas: Seven provinces, including Badakhshan, Balkh, Helmand, Kandahar, Laghman, Nangarhar, and Uruzgan. While poppies are grown in other provinces, poppy production is the predominant activity and main source of income in these areas. This area will be relatively food secure if earnings from poppy production continue as in the past; however, if poppy production is eliminated or severely curtailed and other sources of income are not made available, the region could suffer from high to extreme food insecurity. Near-term program is food secure if the poppy crop is not damaged.[6]

2.3 Afghanistan National Environment Policies and Procedures

In June 2002, for the first time in the history of Afghanistan, an authority for environmental management was mandated in the newly formed government – The Ministry of Irrigation, Water Resources and Environment (MIWRE). Since 2002 several ministerial changes have occurred. MIWRE is now defunct and has been replaced by the Ministry of Energy and Water (MoEW). This was followed by the creation of the National Environmental Protection Agency (NEPA), with the aid of United Nations Environment Program (UNEP), has produced the Environmental Management Act (EMA) that focuses on several areas including:

- Integrated Environmental Management
- Integration of Environmental Issues Into Development Planning
- Integrated Pollution Control
- Pollution Prevention Control (including licensing)
- Waste Management (duty of care, waste management licenses etc)
- Water Resources Conservation and Management
- Biodiversity and Natural Resource Conservation and Management
- National Biodiversity Strategy
- Protected Areas management
- Sustainable Use and Conservation of Species
- Species Trade
- Access to Genetic Resources

[4] IBID.
[5] IBID.
[6] IBID.

- Compliance and Enforcement

In addition to the EMA, several other environmental related laws currently exist as illustrated by the table below.

Afghan Environmental Law	**Date**
Water Law	1981
The Forestry Law	2000
Law for Land Ownership	2000
Nature Protection Law	1986/2000
Hunting and Wildlife Protection Law	2000
Range Management Law	2000
Agriculture Cooperative Development Law	2000
Charter for the Development of Fertilizer and Agro-chemicals	2000

Within Afghanistan, economic development through natural resource management and biodiversity conservation depends on the creation of effective institutions and policies that will mitigate existing threats and increase opportunities for conservation through better governance, enforcement, and support for the rule of law. There are hopeful signs, including enacted the Environment Law and Mining Law, as well as current drafts pending in Protected Area Regulations and Rangeland. There appear to be few laws or regulations specifically addressing wildlife, wildlife trade, or hunting.

3.0 EVALUATION OF ACTIVITY/PROGRAM ISSUES WITH RESPECT TO ENVIRONMENTAL IMPACT POTENTIAL

The potential impacted area of a given project (generally referred to as the Project Area) is defined by the nature of the proposed action and the sensitivity and circumstances of the environment in which it will occur.

Types of impact considered, and environmental consequences resulting from the impacts of projects include:

Direct impact – those directly due to the Project itself such as the conversion of land previously used for agriculture.

Indirect impact – those resulting from activities prompted by the Project, but not directly attributable to it. The use of rock or crushed brick for project works, for example, has an indirect impact of increasing the demand for these materials.

Cumulative impact – impacts in conjunction with other activities.

Many short-term negative impacts can be avoided or otherwise mitigated through proper designs and applying environmentally appropriate methods. Long-term negative impacts can result from the loss of agricultural land to other land uses and air and water pollution.

Interdisciplinary value-chain analysis for each of the priority value chains eg. Wheat, fruit, trees, and vegetables

Activities will begin with a study or consolidation of existing studies on markets, products, linkages and strategies in Afghanistan. Specific product sectors will be identified as high potential marketing projects and market linkages and maps will be developed. Local and (district) level government officials from the

Ministry of Agriculture, as well as other appropriate district level producer Associations will be closely involved in these studies.

Conduct participatory rural assessment-based farming systems analyses in representative valleys
Gain a thorough understanding of the farming systems of the five target districts at a micro-level. Ghor is mountainous, and the populations are spread throughout valleys with some form of natural water source (spring or rain-fed). Using the Participatory Rural Appraisal method, we will learn in-depth information about the communities, as well as allow them a voice in the design, and implementation of the program. Data will also be used to gauge community acceptance levels to the proposed activities.

Introduce and disseminate improved wheat varieties (disease, pest, and drought tolerant)
Two large sets of test demonstration seed multiplication wheat plots, using currently unused MOA lands, will be established. The plots will be used to test the adaptation of varieties to local conditions, demonstration to farmers – through a Farmer-Field-School approach to field days and initial seed multiplication. Field days will include training on proper planting, weed and pest control, fertility management, harvest, post-harvest handling and storage of the wheat crop. Conservation farming will be encouraged to enhance soil fertility, reduce build-up of diseases and pest populations, and reduce production risk through increased crop diversity.

Establishment of sustainable kitchen/school/health post vegetable and fruit gardens for improved dietary diversity
Gardens will be an integrated training site system consisting of small gardens, food preservation training, and health and nutrition messaging. About 100 small garden sites are planned over the life of the MYAP, and will be monitored by Ministry of Agriculture staff. The gardens will incorporate conservation farming techniques, and use of organic fertilizers. Training in food preservation provides a way of maintaining vegetable consumption during lean periods. Together, these components increase small-scale agricultural production and utilization at the household level.

Tree Nurseries for resilience against future shocks
Ten tree nurseries will be created over the life of the MYAP. The nurseries will provide environmental enhancement by addressing soil depletion of soil organic matter and soil nutrients primarily due to deforestration. Soil erosion and excessive leaching are also widespread problems. Farmers will be trained on conservation farming to prevent erosion and nutrient leaching through the use of mulches and compost. The nurseries will strengthen the target households' resilience against future shocks by protecting the sell off of assets in the event of a shock. Two of the nurseries will be developed on currently unused MOA land, and the other eight on private land. Walnut, apricot, apple, almond, acacia and Fraxinus along with other locally-appropriate herbs will be the primary tree species planted in the nurseries. Those species will add to household level income, as an income generating crop.

Provision of appropriate health and growth monitoring to vulnerable children
This training activity will have little or no environmental impact, but rather will improve health through nutrition training and build community resilience against future health/nutrition shocks.

Provision of appropriate nutritional support to vulnerable children
This feeding activity will have little or no environmental impact, but rather will improve health through nutrition training and build community resilience against future health/nutrition shocks.

Utilize existing health structure or system to train/refresh health workers in identifying malnourished children
This training activity will have little or no environmental impact, but rather will improve health through nutrition training and build community resilience against future health/nutrition shocks.

Provide supplementary feeding to malnourished pregnant and lactating women
This feeding activity will have little or no environmental impact, but rather will improve health through nutrition training and build community resilience against future health/nutrition shocks.

Utilize existing health systems to train health workers in identifying at risk women
This training activity will have little or no environmental impact, but rather will improve health through nutrition training and build community resilience against future health/nutrition shocks.

Provide behavior change communication through Mother/Father Groups
This training activity will have little or no environmental impact, but rather will improve health through nutrition training and build community resilience against future health/nutrition shocks.

4.0 RECOMMENDED MITIGATION ACTIONS (INCLUDING MONITORING AND EVALUATION)

4.1 Mitigation actions and conditions

The intent of the mitigation actions and conditions detailed in this section is to assure that no sub-grant activities with significant adverse environmental impacts are implemented under this project. These environmental screening and review procedures specify how activities will be examined on an individual basis to comply with the determinations of this IEE in accordance with Reg. 216. These procedures are intended to result in environmental accountability and soundness, by requiring that the MYAP and local partners put in place specific mechanisms to promote environmental review capacity and other environmental capacity. To ensure that interventions are designed in a sound and sustainable manner, MYAP will work with the appropriate USAID and national officers to achieve compliance with these procedures.

4.1a Environmental Screening and Review Procedures

Environmental screening and review procedures will be adopted for all sub grant activities not defined at the time of the proposal.

These procedures are set out in the attached draft **Table 1 (Synopsis of Monitoring and Mitigation Measures plus Recommended Environmental Decisions for Activities) which starts on page 24 of the IEE document. This table provides guidance on sub-activities.**

Environmental Review Form and accompanying Environmental Review Form instructions. MYAP will prepare or cause to be prepared the appropriate documentation for each activity.

Under these procedures, each activity in a sub grant will result in one of three screening results:

- Very low risk
- Moderate or unknown risk
- High-risk

Activities found to be (1) high risk or (2) moderate/unknown risk will require completion of an environmental review. For each activity, the environmental review will result in one of three possible
recommended determinations:

- No significant adverse impacts

- No significant adverse impacts given specified mitigation and monitoring
- Significant adverse impacts

Final review and clearance authority for the environmental documentation form will lie with the Mission Environmental Officer (MEO), with two exceptions:

- The environmental reviews and recommended determinations for any "high risk" activities will require clearance by the Mission Environmental Officer (MEO), the Regional Food For Peace Officer and the Bureau Environmental Officer (BEO).
- Recommended determinations indicating "significant adverse impacts" will incur Regulation 216 (22 CFR 216) requirements for the conduct of an Environmental Assessment.

No sub grant funds will be awarded until environmental documentation for the sub grant activity has undergone final review and clearance.

This clearance is granted on the condition that all mitigation and monitoring measures specified in the environmental review are binding requirements.

The attached Environmental Review form is a draft. USAID/Kabul will facilitate the refinement of this form with MYAP, the MEO and the BEO to meet project needs.

4.1b Capacity-building for Environmental Review

The MYAP Afghanistan consortium will have a Monitoring and Evaluation team and the Monitoring and Mitigation questions that make up the environmental review process will be incorporated into existing M&E activities. This survey will be composed of best practices/lessons learned from other Title II programs utilizing similar activities/approaches in fragile environments. In addition once the MYAP is approved, members of the M&E team will be involved in refining these questions prior to implementation. MYAP Afghanistan will have the capacity to complete the environmental screening and review process, and to implement the mitigation and monitoring measures.

USAID/Kabul is responsible for assuring that MYAP Afghanistan implementing partners have the human capacity necessary to incorporate environmental considerations into program planning and implementation and to take on their role in the Environmental Screening Form process. Implementing partners should seek training as needed, such as through participation in the Africa Bureau regional ENCAP training as well as those organized by Sun Mountain International, on behalf of Title II Programs Office.

4.1c Adherence to environmentally sound design principles

MYAP Afghanistan Implementing partners will screen proposed activities according to the *USAID Africa Bureau Screening and Environmental Review Process*, which is described in Annex G of the Bureau's *Environmental Procedures Training Manual 2005* entitled "Umbrella IEEs and Subgrant Environmental Screening.," (p.263) as well as in the *Africa Bureau Environmental Guidelines,* Part III. Both can be found at http://www.encapafrica.org/Resources.htm).

World Vision will take into consideration potential environmental impacts in the design and implementation of its activities. These activities will also be monitored during the life of the project to ensure that mitigation measures have been carried out as described. These mitigation

and monitoring measures are described in Table 1 at the end of this document. Note that in some cases, as in Conservation Farming, a sub sample (approx 500) of the total households will be monitored.

MYAP Implementing partners will take into account the Africa Bureau *Environmental Guidelines for Small-Scale Activities in Africa, 2nd edition* and other appropriate Africa Bureau and generic environmental assessment sources, to assist in determining what potential projects impacts should be of concern for different types of development activities in various settings, and which impacts to mitigate and monitor for a particular development activity.

Implementing partners must identify in the Environmental Review Report all proposed environmental mitigation and monitoring requirements. Once the Environmental Review Report is approved, mitigation measures and monitoring procedures stated in the Environmental Review Report will be considered as a requirement. Additionally, project implementers should ensure that the agreed-upon mitigation and monitoring measures are in place.

4.1d Environmental Monitoring & Evaluation

Mitigation and monitoring measures specified in the environmental reviews submitted under procedures described in 4.1a are binding requirements. MYAP Afghanistan shall assure that these measures are implemented.

All periodic reports of the implementing partner to USAID/Mission shall contain an environmental section. This section shall summarize:

- The state of implementation of environmental mitigation and monitoring measures
- Results of environmental monitoring and any unexpected impacts,
- The success or failure of mitigation measures being implemented,
- Any major modifications/revisions to the project, mitigative measures or monitoring procedures.

USAID Afghanistan Mission's EO and the MYAP Project Manager will be ultimately responsible for monitoring environmental impacts of all project-financed activities. This may include:

- monitoring and evaluation of activities after implementation for unforeseen environmental impacts that may need to be mitigated. This process should be integrated into Mission field visits and consultations with MYAP Afghanistan.
- review of the implementing partner's reports with respect to results of environmental mitigation and monitoring procedures
- reporting on implementation of mitigation and monitoring requirements as part of the summary of activities and their status that is passed on to the MEO and BEO; and
- recommended adjustments to subproject budgets to address additional mitigation or monitoring needs incorporated in subproject work plans

Periodic visits of the MEO or BEO may also be requested for advice, refresher training, and confirmation that environmental processes are in place.

The mitigation and monitoring activities as defined in Table 1 will be incorporated within the environmental compliance management program of MYAP Afghanistan. This ensures compliance with mitigation measures. Monitoring and evaluation will include the following:

- Preparation of an environmental monitoring plan within one month of approval for funding of this program (note that monitoring details are included in Table 1 at the end of this document and a draft monitoring plan is included in the Environmental Review Report (Appendix A)). The M&E Manager will be responsible for preparation and implementation of the plan.
- Monthly and bi-monthly visits to monitor the status of the projects. For some projects, a sub sample will be reviewed.
- Quarterly meetings of the Manager and technical staff involved in the Food for Assets project will be held to discuss the implementation of the plan and review compliance with set mitigation measures.
- Development of additional mitigation measures whenever necessary and possible.
- Preparation of an Environmental Status Report by Program Managers at the end of the project year

To assure that these standards are adhered to, senior agricultural management staff will draw on technical expertise that is available at WV's Headquarters in Washington D.C.

4.1e Adherence to national environmental laws and regulations

The environmental screening and review procedures described in 4.1a do not substitute for the environmental laws and policies of the host country.

4.1f Adherence to USAID pesticide procedures

This IEE does not cover pesticides or other activities involving procurement, use, transport, storage or disposal of toxic materials. Except as noted in the attached Environmental Review Form any pesticide activities will require an amended IEE.

4.2 Recommended Determinations

This Initial Environmental Examination (IEE) satisfies the conditions of the environmental procedures for umbrella activities and delegation of environmental review responsibility to Missions for PVO/NGO umbrella-type projects (Cable 95 STATE 257896).

The following determinations are recommended:

1. A Categorical Exclusion is recommended for project-financed technical assistance, training and education, institutional strengthening, and information exchange activities that include no physical interventions and no direct effects on the environment.

This determination is recommended pursuant to 22 CFR 216.2(c)(1)(i) and 216.2(c)(2)(i), (iii) and 216.3(a)(2)(iii). The Environmental Review Instructions and Form will be used to confirm this determination for each activity.

Exceptions:

- This categorical exclusion does not apply to education, technical assistance, or training if such includes activities directly affecting the environment, such as construction of facilities, per 216.2(c)(2)(i),

- This categorical exclusion likewise does not apply to studies, projects, or programs intended to develop the capability of recipient countries to engage in development planning when designed to result in activities directly affecting the environment, per 216.2(c)(2)(xiv).

2. A Negative Determination with Conditions is recommended for all other sub grant activities not yet defined in detail.

This IEE specifies a set of measures (section 4.1) to ensure adequate environmental review of USAID supported activities, and to assure that no sub grant activity with significant adverse environmental impacts will be implemented under this IEE. This determination is recommended with the explicit commitment and understanding that ALL measures set out in 4.1 and table 1 constitute binding requirements and will be implemented in full.

5.0 SUMMARY OF FINDINGS

5.1 Environmental Determinations

Based on the environmental review presented in this IEE, the following determinations are made:

1. Categorical exclusion

A recommendation for ***categorical exclusion*** is requested for the following activities:

Pursuant to 22 CFR 216.2 (c)(2)(i) Education, technical assistance, or training programs except to the extent such programs include activities directly affecting the environment (such as construction of facilities, etc):

- Provision of appropriate health and growth monitoring to vulnerable children
- Provision of appropriate nutritional support to vulnerable children
- Utilize existing health structure or system to train/refresh health workers in identifying malnourished children
- Provide supplementary feeding to malnourished pregnant and lactating women
- Utilize existing health systems to train health workers in identifying at risk women
- Provide behavior change communication through Mother/Father Groups

Pursuant to 22 CFR 216.2 (c)(2)(iii) Analyses, studies, academic or research workshops and meetings

- Interdisciplinary value-chain analysis for each of the priority value chains eg. Wheat, fruit, trees, and vegetables
- Conduct PRA-based farming systems analyses in representative valleys

2. Negative determination

The following activities are determined to qualify for Negative Determination without conditions (22 CFR 216.3(a)(2)(iii)).

Establishment of sustainable kitchen/school/health post vegetable and fruit gardens for improved dietary diversity

3. Negative Determination with conditions (Umbrella IEE)

The following activities are determined to qualify for Negative Determinations with Conditions (22 CFR 216.3(a)(2) (iii)). MYAP/Afghanistan has developed design criteria for such actions which, if applied in the design of the action, will avoid a significant effect on the environment:

- Introduce and disseminate improved wheat varieties (disease, pest, and drought tolerant)
- Establish Tree Nurseries for community resilience against future shocks

Please see Table 1 (Synopsis of Monitoring and Mitigation Measures plus Recommended Environmental Decisions for Activities) which starts on page 24 of the IEE document. This table provides guidance on sub-activities.

Based on environmental review procedures, including an environmental monitoring system (EMS), the use of an environmental screening form and the monitoring, evaluation and mitigation procedures specified in this IEE, a **Negative Determinations with Conditions (22 CFR 216.3(a)(2) (iii))** is recommended for the following activities:

None

5.2 Conditions

The conditions are:

1) Implementation of environmental screening and review procedures for sub grants, as set out in 4.1a and the attached Environmental Review Form and Instructions
2) Capacity-building for environmental review (4.1b)
3) Adherence to environmentally sound design principles in sub grant projects (4.1c)
4) Appropriate environmental mitigation and monitoring for sub grant projects (4.1d) and Table 1
5) Adherence to host country environmental laws and policies (4.1e)
6) Adherence to USAID pesticide procedures (4.1f)

Table 1. Synopsis of Monitoring and Mitigation Measures plus Recommended Environmental Decisions for Activities

Activity & Scale	Sub Activity	Potential Environmental, Social & Health Impact	Monitoring & Mitigation measures	Responsibility for monitoring	Recommended Determinations
Provision and Plant Agro-Forestry species and fruit trees	Pond	Danger to children or animals falling into pond Soil erosion Contamination from surrounding toilets/latrines	• Ensure pond areas are fenced using an aloe hedge, barbed wire, sticks or grass matting. Use a gate for access. • Train in soil erosion-reducing best practice • Ensure outer edges of water retaining banks are gently-sloping and seeded with grasses and shrubs • Locate pond at least 15m from nearest upstream toilet for new projects where feasible • Provide sanitation and hygiene training	Program Manager Program Manager	**ND with conditions** 22 CFR 216.3(a)(2) (iii)
	Trench gardens	Stone removal for construction leading to soil erosion Beneficial environmental	• Initial training in stone removal and its link to	Program Manager	

Activity & Scale	Sub Activity	Potential Environmental, Social & Health Impact	Monitoring & Mitigation measures	Responsibility for monitoring	Recommended Determinations
		impact -use of organic manure reduces need for using artificial fertilizer	erosion		
	Food preservation	Use bottles previously used for non-food use Bottles not properly cleaned Bottles not airtight	• Train in risks of using non-food containers/poorly washed food containers or allowing air in containers enabling mould spores to enter	Program Manager	
	Compost heaps	Seepage of effluent into drinking water supply Children contaminated by the compost	• Use dry animal manure that has already partly broken down. • Cover compost heap with plastic sheets or grain bags and weigh down with stones		
	Fencing	Pieces of barbed wire left lying around	• Train in dangers of barbed wire especially tetanus • Encourage live fencing or grass screens.	Program Manager	
	(All)	Community conflict	• Involve	Program	

Activity & Scale	Sub Activity	Potential Environmental, Social & Health Impact	Monitoring & Mitigation measures	Responsibility for monitoring	Recommended Determinations
		from non-participants	community in selection of participants • Ensure community understands why only certain households have been selected	Manager	
	(All)	Burden of heavy work on women	• Training on gender distribution of work	Program Manager	
Provision and Plant agro-forestry species and fruit trees	Digging of permanent basins or potholes 30cm*30cm	Destruction of natural forest when creating fields	• Only existing fields will be used for this activity • Surplus soil used to make a small ridge on the down slope side		**ND with conditions** 22 CFR 216.3(a)(2) (iii)
	Addition of manure, compost and other organic matter	Beneficial environmental impact -use of organic manure reduces need for using artificial fertilizer	• No monitoring or mitigation needed		
	Growing fruit trees	Beneficial environmental impact -trees provide shade and roots help to mitigate soil erosion	• Use local species where possible		
	Growing legumes	Beneficial environmental impact	• No monitoring or mitigation		

Activity & Scale	Sub Activity	Potential Environmental, Social & Health Impact	Monitoring & Mitigation measures	Responsibility for monitoring	Recommended Determinations
		-use of nitrogen fixing plants reduces need for using artificial fertilizer	needed		
	Contour ridges	Soil erosion from poor contour ridge design	• Initial soil conservation workshops will ensure contour ridges are properly made using the A-frame method	Program Manager	
	Storm drains	Soil erosion as water leaves storm drain Stone removal	• Use stone silt traps at both ends of storm drain • Train in awareness of link between stone removal, soil erosion and loss of productive land	Program Manager	
	Establishment of erosion control grasses	Exotic species used which can become invasive	• Use local species where possible		
	(All)	Community conflict from non-participants	• Involve community in selection of participants. Ensure community understands why only certain households	Program Manager	

Activity & Scale	Sub Activity	Potential Environmental, Social & Health Impact	Monitoring & Mitigation measures	Responsibility for monitoring	Recommended Determinations
			have been selected • Use wealth-ranking criteria in selecting households that use transparent locally accepting criteria		
	(All)	Burden of heavy work on women	• Training on gender distribution of work	Program Manager	
Introduce and disseminate improved wheat seed varieties	Small Plots of land identified	Demonstration plots to show effectiveness of improved seed varieties	• Train in awareness of link between vegetation, soil erosion and reduction in farm land • Use Organiic fertilizers and no pesticides • Use farm land under cultivation	Program Manager	**ND with conditions** 22 CFR 216.3(a)(2) (iii)
Establishment of Sustainable Gardens	Pond	Danger to children or animals falling into pond Soil erosion Contamination from surrounding toilets/latrines	• Ensure pond areas are fenced using an aloe hedge, barbed wire, sticks or grass matting. Use a gate for access. • Train in soil	Program Manager Program Manager	**ND with conditions** 22 CFR 216.3(a)(2) (iii)

Activity & Scale	Sub Activity	Potential Environmental, Social & Health Impact	Monitoring & Mitigation measures	Responsibility for monitoring	Recommended Determinations
			erosion-reducing best practice • Ensure outer edges of water retaining banks are gently-sloping and seeded with grasses and shrubs • Locate pond at least 15m from nearest upstream toilet for new projects where feasible • Provide sanitation and hygiene training		
	Trench gardens	Stone removal for construction leading to soil erosion Beneficial environmental impact -use of organic manure reduces need for using artificial fertilizer	• Initial training in stone removal and its link to erosion	Program Manager	
	Keyhole gardens	Danger to children and soil erosion through wall collapse Stone removal	• Initial training in proper construction of keyhole gardens • Bi-monthly	Program Manager	

Activity & Scale	Sub Activity	Potential Environmental, Social & Health Impact	Monitoring & Mitigation measures	Responsibility for monitoring	Recommended Determinations
			monitor stability of garden walls • Initial training in stone removal and its link to erosion		
	Food preservation	Use bottles previously used for non-food use Bottles not properly cleaned Bottles not airtight	• Train in risks of using non-food containers/poorly washed food containers or allowing air in containers enabling mould spores to enter	Program Manager	
	Compost heaps	Seepage of effluent into drinking water supply Children contaminated by the compost	• Use dry animal manure that has already partly broken down. Cover compost heap with plastic sheets or grain bags and weigh down with stones		
	Fencing	Pieces of barbed wire left lying around	• Train in dangers of barbed wire especially tetanus • Encourage live fencing or grass screens. •	Program Manager	
	(All)	Community conflict	• Involve	Program	

Activity & Scale	Sub Activity	Potential Environmental, Social & Health Impact	Monitoring & Mitigation measures	Responsibility for monitoring	Recommended Determinations
		from non-participants	community in selection of participants • Ensure community understands why only certain households have been selected	Manager	
	(All)	Burden of heavy work on women	• Training on gender distribution of work	Program Manager	
Provision of appropriate health and growth monitoring to vulnerable children		No negative impacts anticipated			**CE** 22 CFR 216.2 (c)(2)(iii)
Provision of health care training for identifying at risk vulnerable children		No negative impacts anticipated			**CE 22 CFR 216.2 (c) (2) (i)**
Provision of health care training for identifying at risk vulnerable women		No negative impacts anticipated			**CE** 22 CFR 216.2 (c)(2)(i)
Provision of behavior change		No negative impacts anticipated			**CE** 22 CFR 216.2 (c)(2)(iii)

Activity & Scale	Sub Activity	Potential Environmental, Social & Health Impact	Monitoring & Mitigation measures	Responsibility for monitoring	Recommended Determinations
communication through mothers/fathers groups					
Provision of appropriate nutritional support to vulnerable children		No negative impacts anticipated			**CE** 22 CFR 216.2 (c)(2)(i)
Provide supplementary feeding to malnourished pregnant and lactating women		No negative impacts anticipated			**CE** 22 CFR 216.2 (c)(2)(iii)
Value-chain analysis		No negative impacts anticipated			**CE** 22 CFR 216.2 (c)(2)(i)
Conduct PRA analysis		No negative impacts anticipated			**CE** 22 CFR 216.2 (c)(2)(i)

Appendix A.

Map of Afghanistan, showing the MYAP Afghanistan targeted areas of intervention in purple.